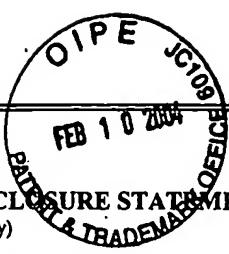


Form PTO-1449 (Modified)					Atty. Docket No. 1856-42801 (40183)		Serial No. 10/706,645	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)					MAY 03 2004 PATENT & TRADEMARK OFFICE U.S. DEPARTMENT OF COMMERCE 669		Applicant Charles R. Rapier et al.	
					Filing Date November 12, 2003		Group 1755	
REFERENCE DESIGNATION U.S. PATENT DOCUMENTS								
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE	
<i>PR</i>	AA	4,151,123	04/24/79	McCann, III	252	462		
	AB	5,736,482	04/07/98	Durand et al.	502	303		
	AC	6,015,285	01/18/00	McCarty et al.	431	7		
<i>↓</i>	AD	6,455,597	09/24/02	Hohn et al.	518	715		
FOREIGN PATENT DOCUMENTS								
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	Translation YES NO	
OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)								
<i>PR</i>	AE	PCT International Search Report for Appln. No. PCT/US03/36051, dated 05/04/04; (3 p.)						
EXAMINER		<i>Paul Weller</i>			DATE CONSIDERED		<i>5/10/06</i>	
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP §609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.								



Form PTO-1449 (Modified)

**INFORMATION DISCLOSURE STATEMENT BY APPLICANT**  
(Use several sheets if necessary)

Atty. Docket No.  
1856-42801 (40183)

Serial No.  
10/706,645

Applicant  
Charles R. Rapier et al.

Filing Date  
November 12, 2003

Group

**REFERENCE DESIGNATION U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE IF APPROPRIATE
PW	AA	3752775	08/14/1973	Yamaguchi et al.	252	464	
	AB	4537873	08/27/1985	Kato et al.	502	242	
	AC	4585752	04/29/1986	Ernest	502	314	
	AD	4738946	04/19/1988	Yamashita et al.	502	303	
	AE	4793797	12/27/1988	Kato et al.	143	7	
	AF	4961786	10/09/1990	Novinson	106	692	
	AG	5837634	11/17/1998	McLaughlin et al.	501	127	
	AH	6399528	06/04/2002	Krell et al.	501	80	03/05/2001
↓	AI	2003/0032554	02/13/2003	Park et al.	502	302	05/13/2002

**FOREIGN PATENT DOCUMENTS**

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	Translation YES      NO

**OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)**


EXAMINER

DATE CONSIDERED

5/10/06

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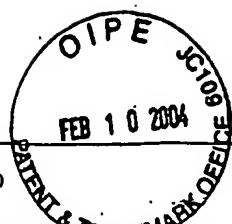
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Application Number				10/706,645
Filing Date				November 12, 2003
First Named Inventor				Charles R. Rapier
Group Art Unit				
Examiner Name				
Sheet	2	of	4	Attorney Docket Number
				1856-42801(40183)

**OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate) title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issued number(s), publisher, city and/or country where published.	T:
pw	AJ	Amato et al., <i>Sintering of Pelleted Catalysts for Automotive Emission Control</i> , pp. 187-197	
	AK	Arai et al., <i>Recent Progress in High-Temperature Catalytic Combustion</i> , Catalysis Today, 10 (1991) pp. 81-94	
	AL	Arai et al., <i>Thermal Stabilization of Catalyst Supports and their Application to High-Temperature Catalytic Combustion</i> , Applied Catalysis A: General 138 (1996) pp. 161-176	
	AM	Artizzu-Duart et al, <i>Catalytic Combustion of Methane on Substituted Barium Hexaaluminates</i> , Catalysis Today 59 (2000) pp. 163-177	
	AN	Beguin et al., <i>Stabilization of Alumina by Addition of Lanthanum</i> , Applied Catalysis 75 (1991) pp. 119-132	
	AO	Bish et al., <i>Quantitative Phase Analysis Using the Rietveld Method</i> , J. Appl. Cryst. (1998) 21, pp. 86-91	
	AP	Cai et al., <i>Atomic Scale Mechanism of the Transformation of <math>\gamma</math>-Alumina to <math>\alpha</math>-Alumina</i> , Physical Review Letters, Vol. 89, No. 23, (12/02/2002) pp. 235501-1 – 235501-4	
	AQ	Chen et al., <i>High Temperature Thermal Stabilization of Alumina Modified by Lanthanum Species</i> , Applied Catalysis A: General 205 (2001) pp. 159-172	
	AR	Dexpert-Ghys, <i>Optical and Structural Investigation of the Lanthanum <math>\beta</math>-Alumina Phase Doped with Europium</i> , Journal of Solid State Chemistry 19, (1976) pp. 193-204	
	AS	Farrington et al., <i>The Lanthanide <math>\beta</math>'' Alumina</i> , Applied Physics A 32 (1983) pp. 159-161	
	AT	Groppi et al., <i>Preparation and Characterization of Hexaaluminate-Based Materials for Catalytic Combustion</i> , Applied Catalysis A: General, 104 (1993) pp. 101-108	
	AU	Jang et al., <i>Catalytic Oxidation of Methane Over Hexaaluminates and Hexaaluminate-Supported Pd Catalysts</i> , Catalysis Today 47 (1999) pp. 103-113	
	AV	Johansson et al., <i>Development of Hexaaluminate Catalysts for Combustion of Gasified Biomass in Gas Turbines</i> , Journal of Engineering for Gas Turbines and Power, Vol. 124 (04/2002) pp. 235-238	
	AW	Kato et al., <i>Preparation of Lanthanum <math>\beta</math>-Alumina with High Surface Area by Coprecipitation</i> , Journal of the American Ceramic Society, 70 [7] (07/1987) pp. C-157-159	
↓	AX	Levy et al., <i>The Effect of Foreign Ions on the Stability of Activated Alumina</i> , Journal of Catalysis 9 (1967) pp. 76-86	

Examiner Signature		Dated Considered	5/10/06
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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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				Complete If Known
Application Number				10/706,645
Filing Date				November 12, 2003
First Named Inventor				Charles R. Rapier
Group Art Unit				
Examiner Name				
Sheet	3	of	4	Attorney Docket Number

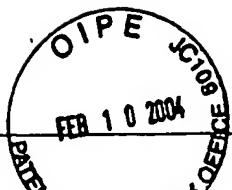
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Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate) title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issued number(s), publisher, city and/or country where published.	T <sup>2</sup>
PRW	AY	Liu et al., <i>Partial Oxidation of Methane over Nickel Catalysts Supported on Various Aluminas</i> , Korean Journal of Chemical Engineering 19 (5) pp. 735-741 (2002)	
	AZ	Liu et al., <i>Partial Oxidation of Methane over Ni/Ce-ZrO<sub>3</sub>/0-Al<sub>2</sub>O<sub>3</sub></i> , Korean Journal of Chemical Engineering 19(5) pp. 742-748 (2002)	
	BA	Machida et al., <i>Effect of Additives on the Surface Area of Oxide Supports for Catalytic Combustion</i> , Journal of Catalysts 103 (1987) pp. 385-393	
	BB	Machida et al., <i>Analytical Electron Microscope Analysis of the Formation of BaO – 6Al<sub>2</sub>O<sub>3</sub></i> , Journal of American Ceramic Society 71[12] pp. 1142-47 (1988)	
	BC	Machida et al., <i>Effect of Structural Modification on the Catalytic Property of Mn-Substituted Hexaaluminates</i> , Journal of Catalysts 123 (1990) pp. 477-785	
	BD	Matsuda et al., <i>8th International Congress on Catalysis Volume IV: Impact of Surface Science on Catalysis Structure-Selectivity/Activity Correlations New Routes for Catalyst Synthesis</i> (pp. IV-879-889)	
	BE	Miao et al., <i>Partial Oxidation of Methane to Syngas over Nickel-Based Catalysts Modified by Alkali Metal Oxide and Rare Earth Metal Oxide</i> , Applied Catalysts A: General 154 (1997) pp. 17-27	
	BF	Nair et al., <i>Pore Structure Evolution of Lanthana-Alumina Systems Prepared through Coprecipitation</i> , Journal of American Ceramic Society 83[8] (2000) pp. 1942-1946	
	BG	Oudet et al., <i>Thermal Stabilization of Transition Alumina by Structural Coherence with LnAlO<sub>3</sub>(Ln = La, Pr, Nd)</i> , Journal of Catalysts 114, (1998) pp. 112-120	
	BH	Rahkeev et al., <i>Transition Metal Atoms on Different Alumina Phases: The Role of Subsurfaces Sites on Catalytic Activity</i> , Physical Review B 67, 115414 (2003) pg. 4	
	BI	Rietveld, <i>A Profile Refinement Method for Nuclear and Magnetic Structures</i> , Journal of Appl. Cryst. (1969) 2, pp. 65-71	
	BJ	Roh et al., <i>Partial Oxidation of Methane over Ni/0-Al<sub>2</sub>O<sub>3</sub> Catalysts</i> , Chemistry Letters 2001 (pp. 666-667)	
	BK	Santos et al., <i>Standard Transition Aluminas, Electron Microscopy Studies</i> , Materials Research, Vol. 3 No. 4 (2000) pp. 104-114	
	BL	Schaper et al., <i>The Influence of Lanthanum Oxide on the Thermal Stability of Gamma Alumina Catalyst Supports</i> , Applied Catalysts 7 (1983) pp. 211-220	
	AM	Schaper et al., <i>Thermal Stabilization of High Surface Area Alumina</i> , Solid State Ionics 16 (1985) pp. 261-266	
✓	AN	Seo et al., <i>Experimental and Numerical Studies on Combustion Characteristics of a Catalytically Stabilized Combustor</i> , Catalysis Today 59 (2000) pp. 75-86	

Examiner Signature

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Substitute for form 1449B/PTO <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>		Complete if Known	
		Application Number	10/706,645
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		Group Art Unit	
		Examiner Name	
Sheet	4	of	4
		Attorney Docket Number	

## OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Signature	<i>Pal Wettie</i>	Dated Considered	5/10/06
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